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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/817,646

04/01/2004

Dennis William Fleege

CRC-167/47181-00289USPT

3383

23569

7590

02/17/2005

SQUARE D COMPANY  
INTELLECTUAL PROPERTY DEPARTMENT  
1415 SOUTH ROSELLE ROAD  
PALATINE, IL 60067

EXAMINER

DONOVAN, LINCOLN D

ART UNIT

PAPER NUMBER

2832

DATE MAILED: 02/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

11-13

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/817,646	FLEEGE ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Lincoln Donovan	2832	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2 are rejected under 35 U.S.C. 102(b) as being anticipated by Clark et al. [US 5,608,198].

Regarding claims 1-2, Clark et al. discloses a circuit breaker gas venting arrangement comprising:

- a base [44] having at least one chamber area [46];
- an opening [16] adjacent the at least one chamber area; and
- a structure [figure 2] having an angled edge portion adapted to direct gas caused by an electrical interruption event towards the opening.

Claims 1-2, 6-10, 12, 16-19, 23-25 and 27-29 are rejected under 35 U.S.C. 102(b) as being anticipated by Nau et al. [US 2,225,791].

Nau et al. disclose a circuit breaker gas venting arrangement comprising:

- a base [10] having at least one chamber area and a floor portion [figure 1];
- an interruption means [figure 1] mounted on the base;
- an opening [48] adjacent the at least one chamber area and positioned a distance away and elevated from the floor;

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- a wall portion [figure 1] distal the entry point of arc gas into the chamber protected by the structure; and

- a structure [50] having an angled edge portion leading away from the floor portion adapted to direct gas caused by an electrical interruption event towards the opening and subsequently to an elongated vent chute to direct the gas from the circuit breaker.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3-5 and 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nau et al. in view of Yokoyama et al. [US 5,164,693].

Nau et al. disclose everything claimed except the base being engaged with a trip unit to form part of the chamber.

Yokoyama et al. disclose a circuit breaker [1] having a trip unit [52, 25] having a portion flush with part of an arc chamber [figure 1, column 9, lines 22-46].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to mount the trip unit with the chamber of Nau et al., as suggested by Yokoyama et al., for the purpose of reducing the size of the breaker.

Claims 11, 20 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nau et al.

Nau et al. disclose everything claimed except the specific shape of the structure and/or approach ramp. It would have been an obvious matter of design choice to have a triangular, trapezoidal shaped ramp and/or a v or u-shaped wall structure, since such a modification would have involved a mere change in the shape of a component. A change in shape is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955).

Claims 21-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nau et al. in view of Arnold [US 6,188,036].

Nau et al. disclose everything claimed except the use of multiple vent chutes.

Arnold discloses a circuit breaker [10] having a plurality of vent chutes [62, 64, figure 3].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a plurality of vent chutes with the circuit breaker of Nau et al., as suggested by Arnold, for the purpose of dispersing arc gas quickly.

### ***Conclusion***

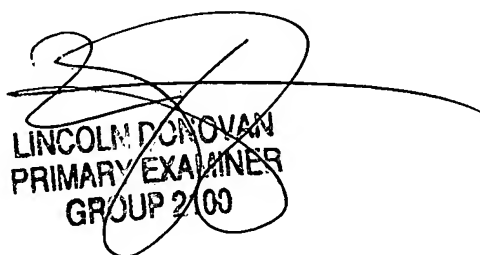
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lincoln Donovan whose telephone number is 571-272-1988. The examiner can normally be reached on M-F 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Elvin Enad can be reached on 571-272-1990. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ldd

  
LINCOLN DONOVAN  
PRIMARY EXAMINER  
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